

WHAT IS CLAIMED IS:

1. A picture processing method comprising:
  - preparing a picture energy function in advance;
  - enlarging an input picture;
  - calculating gradient values of the energy function in a pixel in the enlarged picture;
  - adding a sum of the gradient of said energy function and a value not dependent on the input picture to said pixel; and
  - updating the resulting value of said pixel for picture quality adjustment.
2. The picture processing method according to claim 1 wherein the updating processing of the pixel value is repeated a plurality of number of times.
3. The picture processing method according to claim 1 wherein said value not dependent on the input picture is found in advance from a plurality of pixels.
4. A picture processing method comprising:
  - preparing an energy function of a picture varied depending on an input picture;
  - enlarging the input picture;
  - calculating a value which decreases the energy in a pixel of the enlarged picture;
  - adding said energy decreasing value to said pixel; and
  - updating the resulting value of said pixel for picture quality adjustment.
5. The picture processing method according to claim 4 wherein

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the energy decreasing value is a product of a gradient value of the energy function in the pixel of the enlarged picture with the value not dependent on the input picture.

the updating processing of the pixel value is repeated a plurality of number of times.

a first step of preparing an energy function of a picture in advance and enlarging an input picture;

a third step of adding said energy decreasing value to said pixel;

9. A picture processing apparatus comprising:

enlarging means for enlarging an input picture;

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14. The picture processing apparatus according to claim 12 wherein

said updating means adds a product of a gradient value of said energy function in a pixel in the enlarged picture with a value not dependent on the input picture as said energy decreasing value to said pixel.

15. The picture processing apparatus according to claim 12 wherein

said calculating operation by said calculating means and said updating operation by said updating means are repeated a plurality of number of times.

16. A picture processing apparatus comprising:

holding means for holding an energy function of a picture prepared in advance;

enlarging means for enlarging an input picture;

calculating means for calculating an energy decreasing value in a pixel of the picture enlarged by said enlarging means; and

updating means for adding said energy decreasing value to said pixel to update the pixel value;

said calculation operation by said calculating means and the updating operation by said updating means being repeated a pre-set number of times.